



US Arctic Research Commission

John Farrell
Executive Director
July 14, 2015

Outline:

- Perception of the Arctic....and why it matters
- USARC
- Icebreakers and DOD budget priorities
- Odds and ends
 - Unsung heroes (and heroine)
 - Mysterious Arctic
 - Pablo



**Perceptions
of the
Arctic...**

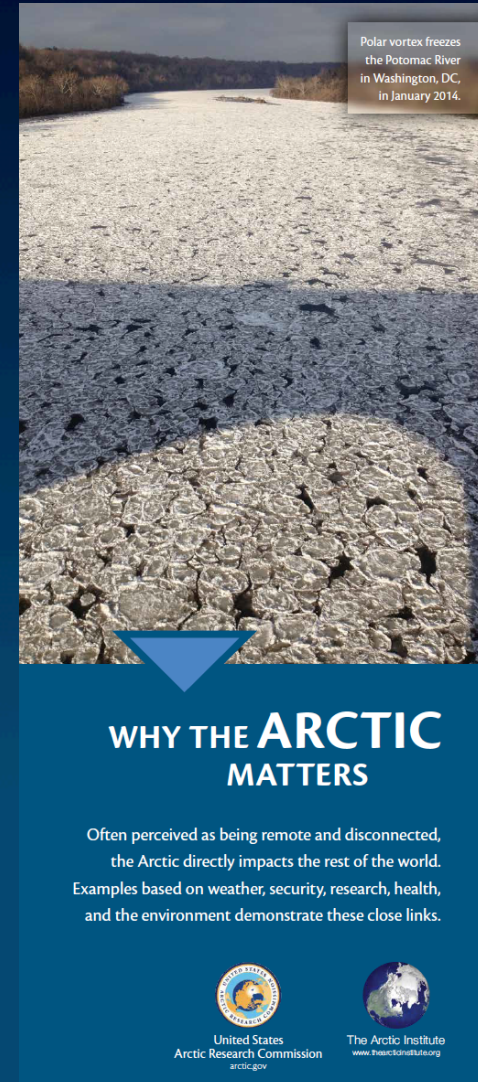
People in this room



How most Americans view it...

Outreach and education

- Nat. Acad. Sci. Polar Research Board
“*Why Arctic Matters*” initiative
- Sen. Murkowski
Economics...State-by-state exports
On average, 25% go to Arctic nations
- US Chairmanship of Arctic Council
Speeches, initiatives, events
- USARC efforts
- Many others....



USARC COMMISSIONERS



FRAN ULMER, CHAIR
Former Chancellor
University of Alaska Anchorage
Anchorage, AK



MARY C. PETE
Director, Kuskokwim Campus
University of Alaska Fairbanks
Bethel, AK



DAVID BENTON
Former Chair, North Pacific
Fisheries Management Council
Juneau, AK



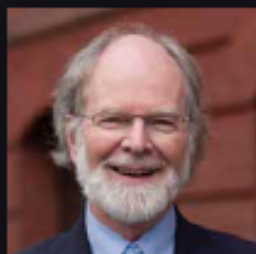
CHARLES J. VÖRÖSMARTY, PhD
City College of New York
City University of New York
New York, NY



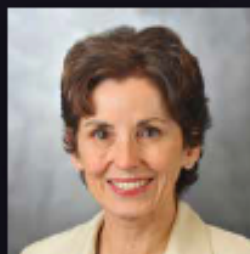
EDWARD SAGGAN ITTA
Former Mayor
North Slope Borough
Barrow, AK



WARREN M. ZAPOL, MD
Massachusetts General Hospital
Harvard University
Cambridge, MA



JAMES J. MCCARTHY, PhD
Biological Oceanography
Harvard University
Cambridge, MA



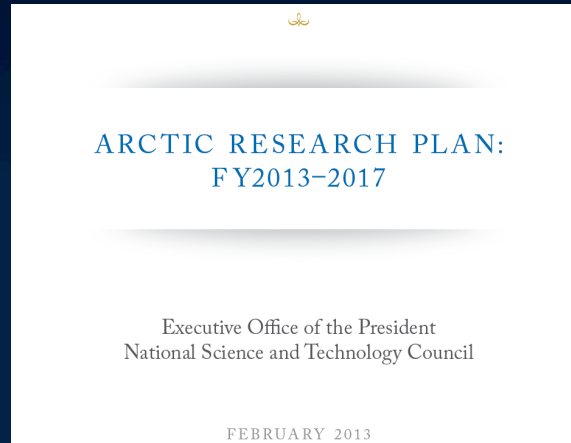
FRANCE A. CÓRDOVA, PhD
Ex Officio
Director, National Science Foundation
Arlington, VA



USARC's duties:

- Develop national Arctic research policy
- Facilitate Arctic research cooperation (w/IARPC)
- Review federal Arctic research programs
- Recommend improvements for data sharing
- Facilitate cooperation w/Alaska & internationally

Federal Arctic research policy/process



USARC set goals



IARPC adopts,
creates & executes
research plan



White House:
OMB/OSTP
coordinate &
review budget



“The Commission shall, after submission
of the President's annual budget request,
review the request and report to
Congress on adherence to the Plan.”



Congress:
Authorizes &
Appropriates

UNITED STATES ARCTIC RESEARCH COMMISSION



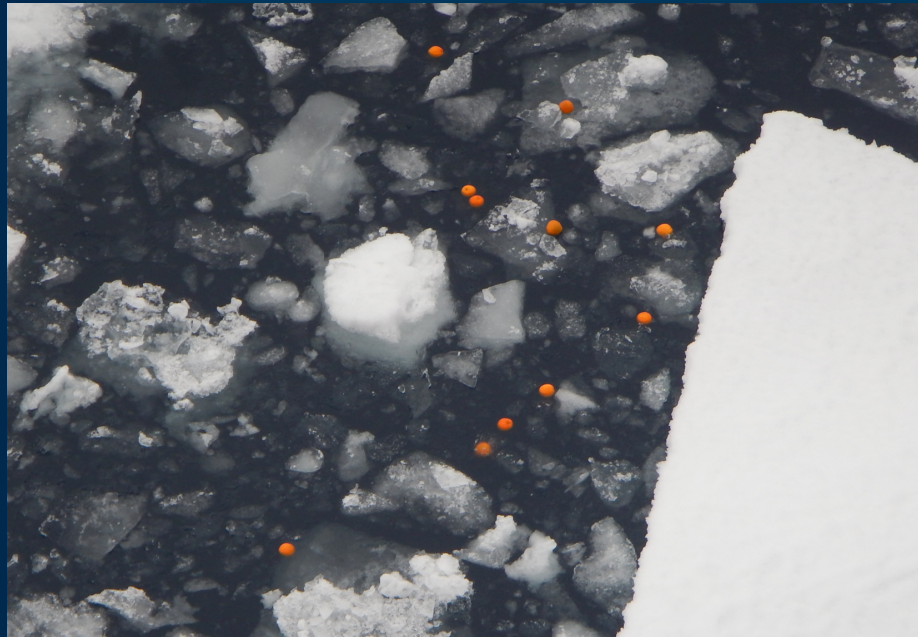
REPORT ON THE **Goals and Objectives** for **Arctic Research 2015–2016**

FOR THE US ARCTIC RESEARCH PROGRAM PLAN

6 priority goals for Arctic research

1. Environmental Change
2. Human Health
3. Natural Resources (renewable energy)
4. The “Built Environment”
5. Cultures and Community Resilience
6. International Scientific Cooperation

Oranges aren't oil



Oranges thrown in ice-infested Arctic waters
to simulate an oil spill. Photo credit: USCG

Standards for Offshore Arctic Operations



The Orlan Platform in the Chayvo field in the sub-Arctic (Sakhalin). Photo reprinted with permission from Exxon-Mobil (<http://corporate.exxonmobil.com/en/energy/arctic/presence/our-arctic-presence>)

Toward a Deep-Draft Seaport in the US Arctic Above 60°N



Port of Nome. Photo
courtesy of the US Army
Corps of Engineers

ARCTIC UPDATE



THE US ARCTIC RESEARCH COMMISSION DAILY EMAIL NEWSLETTER

July 13, 2015

Today's Events:

The 6th Symposium on the Impacts of an Ice-Diminishing Arctic on Naval and Maritime Operations will begin tomorrow. For additional information, please see the "future events" section below.

Today's Congressional Action:

The House and Senate are in session and expected to consider non-Arctic legislation.

Media

Despite Intl' Bans, Pollutants Still Turning Up in Alaska Fur Seals. A [new study](#) of contaminants known as [persistent organic pollutants](#) -- various pesticides, preservatives and industrial chemicals -- in the bodies of Alaska fur seals suggests that despite regulations and treaties banning or curbing their use, it might take a long time to eliminate them from the northern environment. POPs have been accumulating for a long time in the northern latitudes, where they are carried on atmospheric and ocean currents from distant industrial and population centers. [Alaska Dispatch News](#)



Researchers Announce Mysterious Discovery of Ultra-Thermal Flow Beneath Arctic Ice Sheet of Subglacial Lake Whillans. Researchers at the University of

Daily e-newsletter

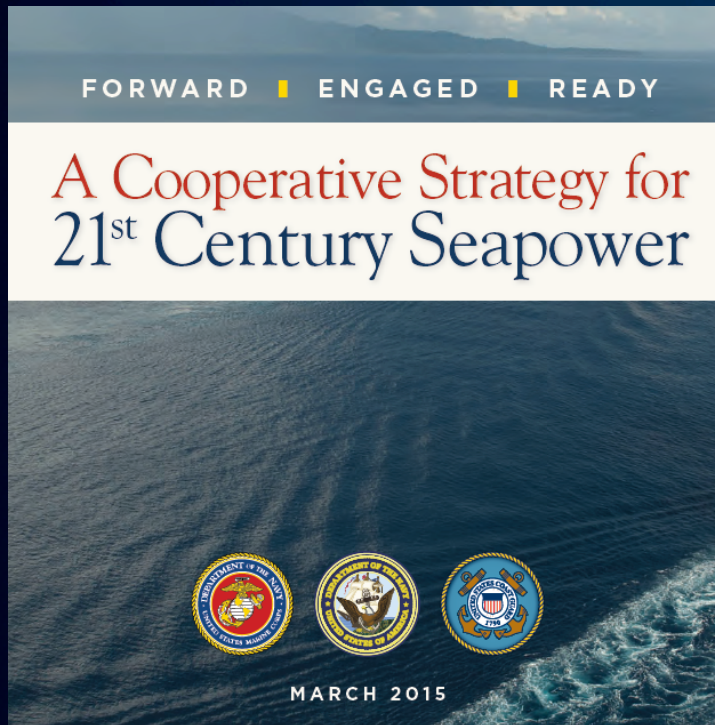
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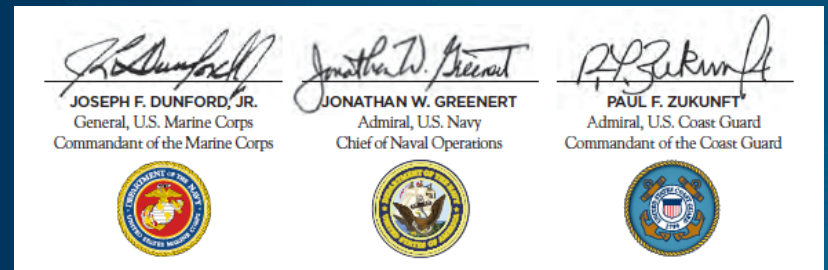
Icebreakers...

RI Senator Jack Reed, ranking Dem. on Sen. Armed Services Comm., said,

“Naval warships in the Arctic are only as effective as the Coast Guard icebreakers, funded by the DHS, that clear their path.”



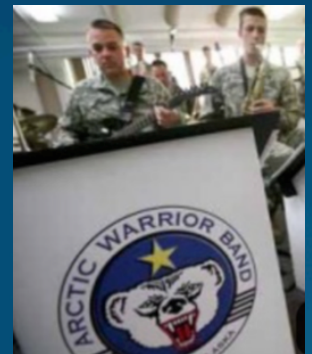
“...require us to further develop our ability to operate in the Arctic, including in ice-covered and ice-obstructed waters...”



Personal opinions on icebreakers:

- Rationale for two heavy polars (\$2B) still makes sense
- USG should pay, rather than private-public partnership
- Too expensive for USCG's budget; needs to be DOD
- Other DOD expenditures to consider:
 - \$55B for 100 new B-2s "Long Range Strike Bomber"
 - \$400M/yr military marching bands (9th Army cut)
- Key: "How can icebreakers compete successfully against other requirements in DOD's budget priorities?"

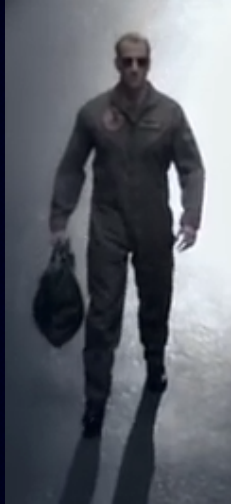
Answer...advertising....?



2015 Super Bowl ad for Northrop Grumman's B-2

\$55B for 100 planes

(30-second spot cost \$4.5M)



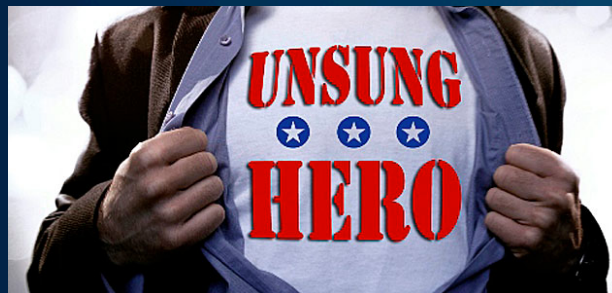
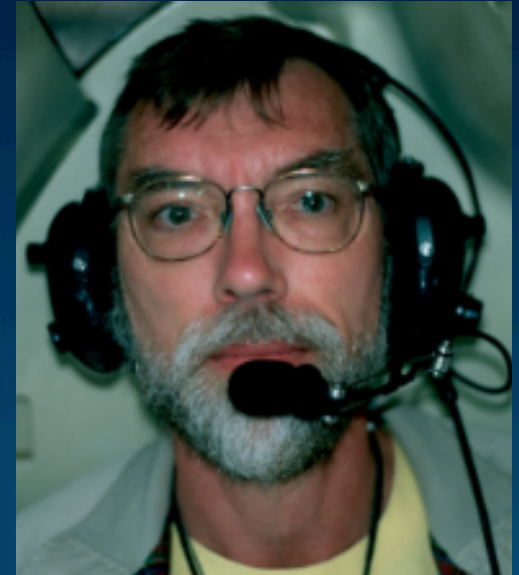
Kathy Crane, NOAA



Zac Hamilla, USN/ONI



Phil McGillivray, USCG



RUSALCA: Russia-America Long-Term Census of the Arctic



Puma (AUV) flies off *Healy* 7/11/15



The Arctic...still a strange and mysterious place





Prestigio....Dr. Pablo Clemente-Colon

